Project Engineering Management

Bharat Heavy Electricals Limited (A Govt. of India undertaking)



Expression of Interest

EOI Ref no: -PW/PE/CMM/Elect. /EOI/2019/1

Subject: - Pre-qualifying requirements & methodology for engineering consultants for lighting system design

Intent: The Project Engineering Management Division of Bharat Heavy Electricals limited (BHEL-PEM), situated in Noida (UP), wishes to empanel vendors/agencies to provide Lighting Design and layout services (using Dialux, Autocad and Lighting design softwares). This document broadly describes the pre-qualification requirements for vendors/agencies desirous to get them empanelled and methodology of BHEL-PEM engaging such vendors/agencies for specific projects

The details of this EOI are also being hosted on our website www.bhel.com with the last date for receiving the response as 24.07.2019; 02:00 PM.

Pre-Qualifying Requirements:

- The vendor / agency should have engineered / prepared Minimum 66 number drawings including Lighting Design calculations (Minimum 20 No.), Lighting layout Drawings (Min. 20 No.), Conduit layout drawings (Minimum 20 No.), Power distribution schemes (Minimum 5 no.) and lighting single line diagrams (Minimum 1 No.) for power stations or refineries and Petro-Chemical plants/process plants/ sub-stations/ other public installations.
- 2. The vendor/agency should have minimum of four experienced graduate Engineers (with minimum qualifications of Graduation in Engineering. Well versed in detailed station lighting system engineering), six design assistant or draftsmen (with minimum qualifications of Diploma in Engineering and 2 years work experience on Autocad and DiaLux) to carry out Lighting design and prepare Lighting layouts, conduit layouts, power distribution schemes, lighting single line diagrams of various outdoor and indoor areas.
- 3. The Vendor/Agency should have the necessary computer facilities and DiaLux/Auto-cad sofwares at his office to carry out Lighting design and prepare Lighting layouts, conduit layouts, power distribution schemes, lighting single line diagrams of various outdoor and indoor areas at his premises. Should have facility for Electronic mailing for communication and exchange of engineering drawings and documents
- 4. The bidder shall furnish the Certificate of Registration with Registrar of Companies or any equivalent document.

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Other information/documents to be furnished by Vendor/Agencies:

- 1. Details are to be furnished regarding the qualified Engineers and of design assistant or draftsmen, their experience and drafting manpower employed as per Sl. No. 2 above.
- 2. The bio data experience of the engineers shall be submitted to BHEL for approval with this prequalification which shall also be reviewed prior to placement of a specific project orders.
- 3. Projects executed by the vendor/agency should be listed with brief details of scope of work and vendor/agency should furnish documentary evidence from client for having successfully completed project(s).
- 4. Average Annual financial turnover during the last 3 years, ending 31st March of the previous financial year, should be submitted.

Notes:

- **1.** The vendor/agency shall agree to sign non- disclosure agreements (NDA) to ensure information security of BHEL-PEM.
- 2. Vendor shall share soft copies of lighting drawings in PDF/Excel/AutoCAD etc. of drawings developed with BHEL.
- **3.** A brief representative scope of work is attached along with to supplement above and acquaint the agency with the work involved.

Scope of Work:

Vendor / Agency shall provide services for Lighting Design and Engineering (using DiaLux and Autocad softwares) and power plant design and design engineering so as to develop lighting design and layouts for a complete thermal, FGD, Hydro, Nuclear or gas power plant including all major systems and facilities within the plant boundary (including the main plant area and auxiliary plant areas).

Lighting design calculations, lighting layout, conduit layout, lighting single line diagram, cable schedule and power distribution scheme of following typical areas shall be part of a thermal power plant lighting design engineering:

Sl. No.	Area
1	Turbine Generator Hall
2	CABLE TRESTLE ALONG A - ROW
3	24V UPS BATTERY & EQPT. ROOM AT EL.8.5M
4	220V DC BATTERY ROOM
5	Stairs -TG Building
6	BOILER MCC ROOM EL.27.5M
7	MV SWGR ROOM EL.3.5M
8	LV SWGR ROOM EL.12.0M
9	CABLE VAULT EL.O.OM BELOW MV SWGR ROOM
10	CABLE VAULT EL.8.5M

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11	CABLE VAULT EL.28.25M BELOW BOILER MCC ROOM
12	CABLE VAULT EL.12M
13	CCR CONTROL ROOM UNIT#1
14	CCR CONTROL ROOM UNIT#2
15	BOILER PLATFORM EL.O.OM,P.A & F.D FAN AREA
16	BOILER PLATFORMS
17	ESP PLATFORMS
18	TRANSFORMER YARD
19	ID FAN AREA
20	HYDROGEN PLANT
21	ESP CONTROL ROOM
22	AUXILIARY BOILER AREA
23	DM PUMP HOUSE
24	CLARIFIED WATER
25	FIRE WATER PUMP HOUSE
26	COMPRESSOR HOUSE BLDG.
27	SERVICE BLDG
28	ADMIN BUILDING
29	MAIN ENTRANCE GATE & TIME OFFICE
30	PARKING IN FRONT OF MAIN GATE
	FACILITIES IN FRONT OF MAIN GATE-SHOPS /PRAYER HALL/
31	RESTROOM/TOILET/WELCOME AND WAITING AREA
32	PLANT AUDITORIUM
33	PERMANENT STORE
34	WORKSHOP
35	CANTEEN
36	FIRE STATION
37	CHEMICAL LAB
38	CW CHLORINATION, RW CHLORINATION & CW TREATMENT PLANT
39	DG BUILDING
40	CPU REGENERATION AREA
41	FUEL OIL PUMP HOUSE
42	ETP
43	WATCH TOWER
44	CW PUMP HOUSE
45	ROADS
46	PARKINGS
47	WEIGH BRIDGE
48	CHEMICAL HOUSE (FOR PT PLANT)
49	RIVER WATER INTAKE MCC,PH,OFFICE ROOM

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The vendor/agency shall also prepare area wise BOQ in each Lighting layout and conduit layout drawing and consolidate the same in process stage as well as final BOQ for the plant.

Exclusions:

- 1. All supplies items including lighting fixtures, lamps, distribution boards, poles, mast, receptacles, switchboards, wires, conduits and misc. items.
- 2. Engineering of Main Power Distribution from 415V LT switchgear to Main LDBs/WDBs

The EOI document in prescribed form duly completed and signed should be submitted (hard copy) original and one photocopy in a sealed cover. The sealed cover super scribed "Expression of Interest for engineering consultants for lighting system design", shall be submitted in tender room addressed to the undersigned by name & designation and sent at the following address on or before 24/07/2019; 02:00 PM:

Mr. I P SINGH, DGM/CMM M/s Bharat Heavy Electricals Ltd., **Project Engineering Management,** Power Project Engineering Institute, **HRD & ESI Complex,** Plot No 25, Sector-16 A, Noida-201301

Kind Attn: I P SINGH/ CMM E-MAIL: indra.pal.singh@bhel.in Ph. No. 0120-4368749 ,9818989654 Mr. N C SHARMA, DY MGR/CMM M/s Bharat Heavy Electricals Ltd., **Project Engineering Management,** Power Project Engineering Institute, **HRD & ESI Complex.** Plot No 25, Sector-16 A, Noida-201301

Kind Attn: N C SHARMA/ CMM E-MAIL: ncsharma@bhel.in

Ph. No. 0120-4213591 ,9911170053

Prospective applicants may seek any clarification in regard of EOI from the below mentioned officials:

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Mr. MEET SAGAR SINGH RAJPAL, DY MGR/ELECT M/s Bharat Heavy Electricals Ltd., **Project Engineering Management,** Power Project Engineering Institute, **HRD & ESI Complex**, Plot No 25, Sector-16 A, Noida-201301

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